

# Northeast Energy Efficiency Partnerships, Inc.



## **Comments of Northeast Energy Efficiency Partnerships (NEEP) to The New Hampshire Energy Planning Advisory Board**

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Northeast Energy Efficiency Partnerships (NEEP) appreciates the opportunity to provide comments to Energy Planning Advisory Board Stakeholder Forum. Based in Lexington, Mass., NEEP is a nonprofit organization founded in 1996 whose mission is to promote energy efficiency in homes, buildings and industry in New England, New York and the Mid-Atlantic states through regionally coordinated programs and policies that increase the use of energy efficient products, services and practices, and that help achieve a cleaner environment and a more reliable and affordable energy system. NEEP supports government policies and coordinates regional initiatives that promote and build market adoption of quality, energy efficient products and services. Working in partnership with environmental and consumer groups, state and federal agencies, businesses, utilities and other non-profits, NEEP serves as a strategist, planner, facilitator, information and training resource, and project manager to help develop and implement regional programs for energy efficiency.

### **New Hampshire's Energy Challenges**

Like the rest of the Northeast, New Hampshire is facing many energy challenges, which fall into three principal areas:

*Economics* – New Hampshire residents and businesses pay among the highest energy bills in the country, and those costs have continued to skyrocket over the last two years. These costs not only force hard lifestyle decisions on individual residents, but also lower their buying capabilities, while also lowering margins for the state's businesses, decreasing its overall economic competitiveness. Further, nearly all of New Hampshire's energy expenditures flow out of state.

*Environment* – New Hampshire is among the eight states that have committed to participating in a Northeast carbon cap-and-trade system proposed through the Regional Greenhouse Gas Initiative (RGGI). We applaud the state's commitment to greenhouse gas reductions, which will need to be addressed principally through reductions in electricity generation in the stationary combustion sector. How New Hampshire structures its policies on meeting its greenhouse gas reduction commitments will have profound effects on energy consumers in the state.

*System reliability* – As you have heard from the Independent System Operator (ISO) for New England, we are facing a crisis of energy resources across our shared New England electric grid, made more acute by the fact that some 46 percent of our electric generating capacity in the region is fueled by natural gas, which is becoming an increasingly restricted and expensive commodity. The answer from the Federal Energy Regulatory Commission (FERC) to this challenge is the Forward Capacity Market (FCM) agreement which it just approved on June 15. But how the rules are written in the NEPOOL/ISO governance process will have a profound impact on how New Hampshire ratepayers will be impacted by this plan. Beyond the FCM, the state can and should play an active role on its own in enhancing electric system reliability.

## **Solutions**

While our many energy challenges are well documented, public policies to address those challenges have been lacking. Fortunately for New Hampshire and the rest of the region, there is a solution that will help us better manage our energy costs, keep our energy dollars in state, assist with the environmental commitments we have made, and enhance the reliability of our energy system. That solution is energy efficiency, which costs approximately two-thirds less than traditional energy supply, is an energy resource indigenous to our region, can have immediate and lasting impact on lowering demand and enhancing electric system reliability, is the most effective means of reducing emissions of carbon and other greenhouse gases, and does not involve the same political difficulties of siting new power plants.

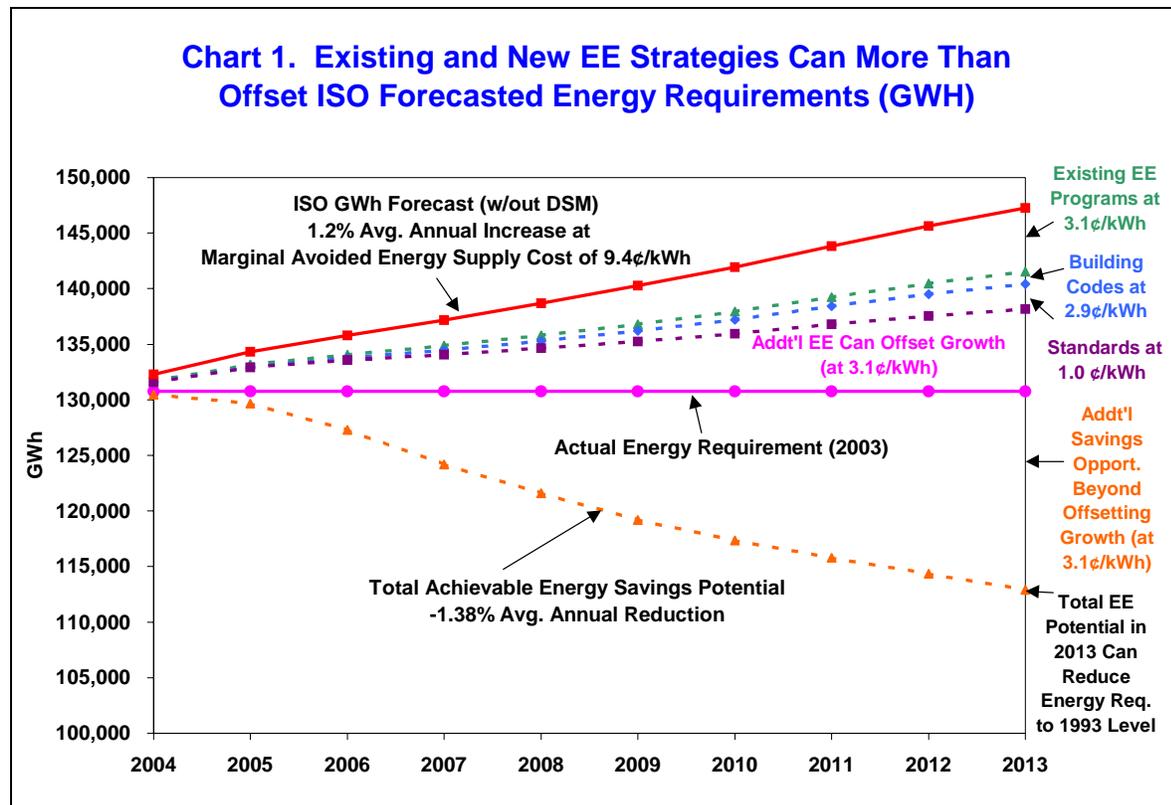
The Northeast states, and New Hampshire in particular, have been effective in utilizing the current System Benefit Charge (SBC)-funded energy efficiency programs to effectively save energy and dollars. However, according to research done by NEEP,<sup>1</sup> the state currently captures at best about 35 percent of the cost-effective energy efficiency available to it. (See Chart 1 below for system-wide analysis of remaining energy efficiency potential in New England.)

The limitation of SBC programs is that they restrict further investment in energy efficiency because their funding is legislatively capped at a level that does not reflect the availability of energy efficiency, nor are they tied to any defined energy savings goal for the state. In addition, evidence from other New England states is showing us that as energy costs rise, demand for these programs is becoming greater, and, in some cases, customers have been turned away because of inadequate funding. Finally, these funds are often siphoned off for other purposes, as occurred in New Hampshire last winter, and as has occurred in other states as well.

Thus, to capture the additional energy efficiency savings, additional policies will be required. These solutions involve a combination of regulatory and legislative action. None of these alone provides a single solution to all of our energy challenges, but, taken together, the recognition of energy efficiency as a resource and the public policies that allow that resource to be tapped is the cheapest, cleanest and quickest way for New Hampshire to better secure its energy future.

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<sup>1</sup> Optimal Energy, Inc. and Northeast Energy Efficiency Partnerships, Inc. November 2004, Updated May 2005. *The Economically Achievable Energy Efficiency Potential in New England.*



These policies include:

1. **Carbon Emissions Cap and Trade Policies:** The model rule established through the Regional Greenhouse Gas Initiative (RGGI) contains a key provision allocating carbon allowance credits towards public benefit investments, which include – among a range of qualifying projects – energy efficiency. That model rule sets a minimum of 25 percent of those allocations for consumer benefits. However, states are free to set higher percentages of those allocations for consumers; Vermont, for example, is designating 100 percent of those allocations for consumer purposes. **The New Hampshire legislature** should follow suit, and designate all of its allocations for consumer benefit, which will not only maximize the impact of energy efficiency in reducing carbon emissions, but will mitigate the price impacts of RGGI on the state’s ratepayers.

Specifically, a projected cap level for New Hampshire of 22,892,730 tons, if 100 percent of allowances went to consumers, would result in revenue for new efficiency investments of between \$17 million (if allowances are valued at \$2 per ton) and \$43 million (with allowances valued at \$5 per ton). Modeling done as part of the RGGI stakeholder process has shown that by using its consumer allocations for energy efficiency, program costs for administering RGGI could result in bill savings to consumers of between 5 and 12 percent, while potentially doubling the current revenues for energy efficiency.

2. **Resource Procurement Standards:** An alternative source of funding for energy efficiency investments in the region is through an energy efficiency portfolio (or resource) standard

(EEPS), where utilities, default service providers and/or retail suppliers are required to meet a certain percentage of their load requirement (or a percentage of forecasted load growth) or peak demand through energy efficiency. Recently, a number of states have adopted some form of an EEPS. In the face of unprecedented and volatile energy costs, regulators are looking to portfolio standards as a way to help diversify utility or distribution company resource portfolios and lower peak demand given the potential burden of increased power outages due to transmission and distribution constraints and the prospect of passing on to ratepayers the additional costs of transmission and distribution upgrades.

As New Hampshire is the only state in the region without a renewable portfolio standard, an opportunity exists for the **New Hampshire legislature** to combine energy efficiency and renewable energy (as well as clean distributed generation) into a “clean energy” portfolio standard. Alternatively, the **Public Utilities Commission (PUC)** could open a proceeding to establish an energy efficiency resource procurement standard or portfolio standard on its own. Recently, the states of Connecticut, Maine and Rhode Island have all enacted or considered legislation which would allow for energy efficiency to be treated as a resource either as part of basic service procurement (as in Rhode Island and Maine) or as part of a standard to meet as part of a portfolio of clean energy options (as is the case with the Connecticut Class III Resource Standard). In addition, the American Council for an Energy Efficient Economy (ACEEE) released published a paper providing excellent guidance to states wishing to set such a resource standard.

3. **Resource Adequacy and Regional System Planning:** In New England, the recent settlement agreement to establish a Forward Capacity Market (FCM)<sup>2</sup> through the Independent System Operator (ISO) for the region includes a provision that alternative resources, including distributed generation, demand response and energy efficiency, can qualify for capacity payments during a transition period (2007-2011) and in the future capacity markets auction. This development presents an enormous opportunity to advance energy efficiency as a resource to help meet the region’s capacity needs. However, many details have yet to be worked out. Former PUC Commissioner Michael Harrington has been representing the New Hampshire PUC in these proceedings, and has done excellent work to help realize the maximum benefits for energy efficiency in the proposed capacity market. A regionally coordinated effort among key parties, including energy service companies, environmental groups, policymakers, regulators, program administrators, and utilities continues to be needed to develop market rules, manuals, and operational procedures to address what qualifies as energy efficiency, how savings will be counted and verified, and who receives the capacity payments. In this area, **the Public Utilities Commission** can and should ensure the maximum benefits for the state’s energy consumers is realized by full inclusion of energy efficiency in the forward capacity markets. In particular, the PUC should commit to New Hampshire working with other New England states on developing a set of common protocols for measuring and verifying energy efficiency in this market.
4. **Ratemaking and Revenue Requirement Reform:** Fundamental to advancing efficiency beyond current policies is the need to address the negative financial effect of lost sales to investor-owned utilities or distribution companies. Cost-recovery strategies in a number of states around the country have been used to successfully “decouple” utility financial health

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<sup>2</sup> The FCM agreement replaced the original ISO-New England Locational Installed Capacity (LICAP) proposal.

from electricity sales volumes to remove financial disincentives to energy efficiency and to make efficiency as financially rewarding as capital investments. Important in any consideration of energy efficiency public policy outside of the current SBC-funded program structure is the need for the **Public Utilities Commission** to address rate design issues, and, in particular, to remove regulatory incentive to earn more revenue by selling more energy.

**5. Fuel Oil and Propane Efficiency Programs:** In addition to its current stable of electric and natural gas energy efficiency programs, the **New Hampshire legislature** should also mandate energy efficiency programs for fuel oil and propane heating customers as well. Between 2003 and the first part of 2006, New Hampshire residential, commercial and industrial customers paid over \$1 billion for fuel oil – money which all flowed out of the state, hurting the local economy. Such programs can take a number of different forms, and be funded in a variety of ways, from a systems benefit charge on oil customers to a profits tax on oil refining or distribution companies (as has been proposed in Connecticut). When it comes to heating fuels, New Hampshire has two options:

- Continue to buy increasingly expensive fuel oil and propane from other parts of the country and the world, or
- Invest in energy efficiency, which costs less and leads to long term savings for consumers and increased job and economic growth for New Hampshire.

**6. Appliance Standards and Building Energy Codes:** Setting a floor on the minimum energy use of products and building is one of the lowest cost ways that a state can realize significant energy savings. In 2002, a coordinated regional project was launched to help states gain the benefits of enacting new state-based energy efficiency standards for a range of commonly available products and appliances. In that time, the states of Vermont, New Hampshire, Rhode Island (twice), Connecticut, New York, New Jersey and Maryland have enacted new appliance standards measures. The New Hampshire legislature can and should join this growing list of states that have taken energy matters into their own hands and adopt new appliance standards. A package of standards for 14 commercial and residential products – including residential furnaces and boilers, which would have significant impact for New Hampshire residents – could by 2020 provide energy savings to the state in the amount of 192,000 megawatt-hours, 2,627,000 million BTUs of natural gas or oil savings, and more than \$314 million in economic benefits, as well as reducing greenhouse gas emissions by millions of tons.

New Hampshire's building energy codes were last updated in 2002 to meet the 2000 International Energy Conservation Code (IECC). Now that the 2006 IECC is completed and available for adoption in the states, we would recommend that the **New Hampshire legislature** require adoption of the 2006 IECC, and that it be made mandatory for all communities in the state. The 2006 IECC is the final product of a code development process that involved the nation's leading experts in energy efficiency, building design and product performance, state and local code officials, product manufacturers and homebuilders. It incorporates the latest information on building practices and contains state-of-the-art efficient building standards. The 2006 IECC, which was explicitly developed to simplify code compliance and enforcement, is far shorter and easier to understand than earlier versions. In addition, the U.S. Department of Energy supports training for the 2006 IECC and will soon be updating its *RESCheck* compliance software to reflect the values of the 2006 IECC. Also,

the 2006 IECC automatically integrates the new mandatory federal standards for equipment efficiency.

- 7. Support of the EPA's Energy Efficiency Action Plan** – Recognizing that energy efficiency remains a critically underutilized resource in the nation's energy portfolio, more than 50 leading electric and gas utilities, state utility commissioners, state air and energy agencies, energy service providers, energy consumers, and energy efficiency and consumer advocates have formed a Leadership Group, together with the U.S. Department of Energy and the U.S. Environmental Protection Agency to address the issue. (See: <http://www.epa.gov/cleanenergy/eeactionplan.htm>)

This group is developing an Energy Efficiency Action Plan, with five core recommendations for states to adopt, including:

- Recognizing energy efficiency as a high priority energy resource.
- Making a strong, long-term commitment to cost-effective energy efficiency as a resource.
- Broadly communicating the benefits of and opportunities for energy efficiency.
- Promoting sufficient and stable program funding to deliver energy efficiency where cost-effective.
- Modifying policies to align utility incentives with the delivery of cost-effective energy efficiency and modify ratemaking practices to promote energy efficiency investments.

Support of the action plan by the Public Utilities Commission, the state energy office, the state legislature and the governor would send a strong message that New Hampshire supports energy efficiency as a means of taking investment in energy efficiency to a new level with an overall goal of creating a sustainable, aggressive national commitment to energy efficiency.

### **Summary**

There are numerous energy challenges facing the state of New Hampshire. The one thing that these challenges have in common is that can be effectively addressed by lowering energy demand. Energy efficiency – in the various forms as outlined above – provides a number of methods for providing that demand reduction in a cost-effective way. Economic modeling consistently shows that increased investments in energy efficiency provide significant economic benefits for those states and regions making those investments through lower energy bills, keeping energy dollars in state, providing good new jobs and efficient equipment sales.

In addition, energy efficiency provides the added benefit of reducing aggregate demand across the entire electric grid, which in turn results in lower wholesale market clearing prices for energy that benefits all consumers. And energy efficiency is the best way to reduce emissions of greenhouse gases and other pollutants.

But for New Hampshire to take advantage of this ready resource, it will need to exhibit public policy leadership that moves energy efficiency out of the box of a “social program” where it has been consigned since electric deregulation in the late 1990s, and allow it to compete alongside traditional energy supplies, while enacting complementary policies to ensure maximum benefit to New Hampshire's residents and businesses.